

National Type Evaluation Program
Certificate of Conformance
for Weighing and Measuring Devices

For:

Retail Motor Fuel Dispenser
Digital Electromechanical
Models: AE, AK, AL, AP and AU Series
Capacity: \$999.99 Total Price
 99.999 Volume Units
 \$9.999 Unit price

Submitted by:

Marconi Commerce Systems Inc.
(formerly Gilbarco Inc.)
7300 W. Friendly Ave.
Greensboro, NC 27420
Tel: (336) 547-5375
Fax: (336) 547-5516
Contact: Gordon Johnson

Standard Features and Options

The Marconi Commerce Systems Inc. model designation consists of a variety of entries based on the dispenser configuration. The device is identified by the model designation AXXXXXX, where the XXXXXX represents various device parameters.

These devices are known by the generic names of MPD-2, MPD-3 and the MPD-ProBlender.

The model designations comprising the series are described on Page 2.

Uses the Marconi Commerce Systems Inc. standardized electronics package
Keypad operating parameter selection
Single display for multiple products on each side of the dispenser

Options: Cash/credit pricing
Customer push-buttons to preset money values for deliveries
TRIND (Transmitter/Receiver in Dispenser)

Optional Models: RAEXXXXX (re-manufactured device)
RAKXXXXX (re-manufactured device)
RALXXXXX (re-manufactured device)
RAPXXXXX (re-manufactured device)
RAUXXXXX (re-manufactured device)

This device was evaluated under the National Type Evaluation Program (NTEP) and was found to comply with the applicable technical requirements of Handbook 44, "Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Effective Date: December 1, 1999

Gilbert M. Ugiansky, Ph.D.
Chief, Office of Weights and Measures
Issue Date: March 23, 2000

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Marconi Commerce Systems Inc.
Retail Motor Fuel Dispenser
Models: AE, AK, AL, AP and AU Series

Application: For use in retail motor-fuel service stations.

Identification: The identification badge is located on the inside panel of the column above the electronics for the dispenser. The model number may be of the following combinations based upon the configuration of equipment.

Sealing: The pin for the meter calibrator may be sealed with a wire security seal.

Model Designation: The Marconi Commerce Systems Inc. model designation consists of a variety of entries based the dispenser configuration. The device is identified by the model designation AXXXXXX, where the XXXXXX represents various device parameters. These devices are known by the generic names of MPD-2, MPD-3 and the MPD-ProBlender.

Code Position	Description
1 - Country of Origin	A. USA
2 - Product	E. Electronic Precision Blender K. Electronic MPD-C/MPD-2 Series L. MPD-3 P. Low Profile MPD-3 Fixed Blender U. MPD-ProBlender
3 - Type of Unit	For units with "E", "K", "L", or "P" in Code Position 2: 1 - Six-Hose Version 2 - Three-Hose Version 4 - Four-Hose Version 8 - Eight-Hose Version For units with "U" in Code Position 2: 1 - Dual Side Dispenser 2 - Single Side Dispenser
4 - Classification	1 - Readout - (2-Wire) 2 - Preset - (2-Wire)
5 - Special Features	1 - Vapor Recovery (Full) 2 - Non-Vapor Recovery (Vapor Recovery Boot Only) 3 - Non-Vapor Recovery (Vapor Recovery Piping)
6 - Display	0 - xx.xxx
7 - Major Revision	No Digit (Blank) - Premodular Electronics A - Modular Electronics C - CRIND and modular electronics (Marconi Commerce Certificate of Conformance Number 99-180) (Gilbarco Certificate of Conformance Number 89-066)

Operation: The dispenser may be used as a stand-alone dispenser or interfaced with a service station console. It may have the unit price selected from the console with the pump handle “on” according to the requirements adopted at the 1986 NCWM.

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Operation (Continued) :

When a customer places their transponder tag near the dispenser, the tag sends a unique tag number and customer preferences to the TRIND located inside the dispenser. This tag number is then sent to the host network (credit card company). The host network confirms that the transmitter tag number is valid and sends back the credit card number to the dispenser. Marconi Commerce Systems Inc. considers this to be a normal credit card transaction except the credit card number itself only gets transmitted in one direction (from the network to the site).

Test Conditions: This Certificate is issued based upon information provided by the manufacturer to change the name of the company from the previous name, Gilbarco Inc., and to transfer ownership of the device covered under Certificate of Conformance Number 87-077A3 to Marconi Commerce Systems Inc. This Certificate is also issued to include the optional Models RAEXXXXX, RAKXXXX, RALXXXX, RAPXXXX and RAUXXXX (re-manufactured devices) that was originally covered under the multi-Certificate of Conformance Number 92-197A1. All institutional knowledge of the previous owner has been transferred to the new company. Test conditions for Certificate of Conformance Numbers 87-077A3 and 92-197A1 and the preceding Certificates are listed below for reference.

Certificate of Conformance Number 87-077A3: This Certificate superseded Certificate of Conformance Number 87-077A2 and was issued to add the TRIND option to Gilbarco Inc. MPD-2 and MPD-3 Series. This option was included without additional testing and was based on information provided by the manufacturer and evaluation of the trend on the Advantage Series (Certificate of Conformance Number 90-115A7).

Certificate of Conformance Number 87-077A2: This Certificate superseded Certificate of Conformance Number 87-077A1. The Electronic Precision Blender (EPB) is designed as an enhanced replacement of the MPD-3 Fixed Blender. The EPB is cosmetically identical to the MPD-3 Fixed Blender, but uses proportional solenoid valves in place of the mechanical orifice plates and valves. The EPB also has provision for a two-product to three grade manifold which will allow blending to occur through any of the three grade hoses.

The EPB was placed into a test stand and evaluated for design and operation at the manufacturer's facility. Pulse counters were connected to the device to determine that the percentage of each product contributed to the blended product was consistent with the ratio selected. The device was installed in a field installation where it was tested initially and then again approximately 30 days later. The octane of the blended product was verified by North Carolina Department of Agriculture.

Certificate of Conformance Number 87-077A1: This Certificate superseded Certificate of Conformance Number 87-077 and was issued to replace the MPD-2 fixed blender listed on the original Certificate with the MPD-ProBlender retail motor-fuel dispenser. Since no MPD-2 fixed blenders had been manufactured since the original evaluation, the manufacturer redesignated the "U" in code position 2 as the MPD-ProBlender.

The MPD-ProBlender is a combination of the MPD-3 and the Salesmaker ProBlender (Certificate of Conformance Number 87-099). The MPD-ProBlender was installed in a service station where it was tested initially and then approximately 30 days later. The device was also evaluated at the manufacturer's facility with a product flow simulator to examine the operation and design of the device.

Certificate of Conformance Number 87-077: The operation of the MPD-3 dispenser (Certificate of Conformance Number 87-077) was evaluated with the dispenser mounted in a test stand and interfaced with a Marconi Commerce Systems Inc. (formerly Gilbarco Inc) T-12C console. An MPD-2 dispenser was installed in a service station where it was tested initially and then 20 to 30 days later. The MPD-3 is identical to the MPD-2 except that it has a lower profile.

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Test Conditions (Continued):

Certificate of Conformance Number 92-197A1: This Certificate superseded Certificate of Conformance Number 92-197 and was issued to change capacities to cover either 5 or 6 digits for price and volume.

Certificate of Conformance Number 92-197: This Certificate was issued to list Gilbarco retail motor fuel dispensers which are remanufactured within company-owned facilities. This Certificate was in addition to the original Certificates of Conformance. The manufacturer certifies that rebuilt equipment is cleaned; inspected; refurbished and tested; and any component or part such as meters (replacement meters are new), pulsers, displays, etc., not meeting specifications is rejected and replaced. Operation and performance are not altered

The results of the evaluations indicate the devices comply with applicable requirements of NIST Handbook 44.

Type Evaluation Criteria Used: NIST Handbook 44, 1999 Edition

Tested By: T. Michel (CA), H. Oppermann (NIST) 87-077; J. Skipper, T. G. Butcher (NIST) 87-077A2

Information Reviewed By: R. Whipple (NIST) 92-197; R. Suiter (NIST) and G. Newrock (NIST) 92-197A1; G. Newrock (NIST), R. Suiter (NIST) 87-077A3; L. Sebring (NIST) and G. Newrock (NIST) 99-162